

Amendments to the Claims

Please cancel claims 9-21, 24, 29-93, 99-113, 116 and 118-120. Please amend claims 1-8, 22, 23, 25, 27, 114, 115 and 117, and add claims 121-126. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing:

1. (currently amended) An isolated polypeptide of the severe acute respiratory syndrome (SARS) virus, wherein the polypeptide comprises a SARS virus Spike (S) polypeptide or a fragment thereof.
2. (currently amended) The polypeptide of claim 1, wherein the fragment comprises the S1 domain (SEQ ID NO: 7307, S2 domain (SEQ ID NO: 7308), the receptor binding region of the S1 domain, the oligomerization domain regions of the S2 domain, the leucine zipper region of the S2 domain, the membrane anchor region of the S2 domain, the hydrophobic domain region of the S2 domain, the cytoplasmic tail region of the S2 domain and/or any of the polypeptide sequences given in SEQ ID NOs: 7193-7194, 7196-7199, 7207-7223, 7398, 7399 and 8041-8240. polypeptide is a Spike (S) polypeptide, an Env (E) polypeptide, a Membrane (M) polypeptide, a hemagglutinin-esterase polypeptide (HE), a nucleocapsid (N) polypeptide, a ORF1a polypeptide, a ORF1ab polypeptide, a proteolytic fragment of a ORF1a polypeptide, or a proteolytic fragment of a ORF1ab polypeptide.
3. (currently amended) The polypeptide of claim 1, wherein the polypeptide comprises an amino acid sequence selected from ~~the group consisting of SEQ ID NO^s: 6039, 7232, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050 or 6052~~ 9962.
4. (currently amended) The polypeptide of claim 1, wherein the polypeptide is in oligomeric form. ~~comprises an amino acid sequence having >75% sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NO^s: 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6052, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9997, 9998, 10149, 10316, 10338, 10339, 10340, 10341, 10342, 10532, 10533, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 11561, 11562, 11618, 11619, 11620, 11627, 11630, 11633 & 11636.~~

5. (currently amended) The polypeptide of claim 4, wherein the oligomer is a trimer. ~~polypeptide comprises a fragment of at least 10 consecutive amino acids of an amino acid sequence selected from the group consisting of SEQ ID NO^s: 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6052, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9997, 9998, 10149, 10316, 10338, 10339, 10340, 10341, 10342, 10532, 10533, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 11552, 11561, 11562, 11618, 11619, 11620, 11627, 11630, 11633 & 11636.~~

6. (currently amended) A The polypeptide of claim 1, wherein the polypeptide is a fusion peptide: comprising an amino acid sequence having >80% sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NO^s: 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6052, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9997, 9998, 10149, 10316, 10338, 10339, 10340, 10341, 10342, 10532, 10533, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 11552, 11561, 11562, 11618, 11619, 11620, 11627, 11630, 11633 & 11636.

7. (currently amended) A The polypeptide of claim 6, wherein the fusion peptide comprises the Spike protein (SEQ ID NO: 6042) or fragment thereof, comprising an amino acid sequence that comprises a fragment of at least 10 consecutive amino acids of an amino acid sequence selected from the group consisting of SEQ ID NO^s: 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6052, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9997, 9998, 10149, 10316, 10338, 10339, 10340, 10341, 10342, 10532, 10533, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 11552, 11561, 11562, 11618, 11619, 11620, 11627, 11630, 11633 & 11636.

8. (currently amended) A The polypeptide of claim 7, wherein the fusion peptide comprises a tag sequence, a second SARS virus protein, a non-SARS virus protein, a bacterial protein and/or an adjuvant, comprising an amino acid sequence having >80% sequence identity to SEQ ID NO: 6042, and/or comprising an amino acid sequence that comprises a fragment of at least 10 consecutive amino acids of SEQ ID NO: 6042, wherein the polypeptide is in the form of a trimer.

9 to 21. (canceled)

22. (currently amended) A vaccine for the treatment or prevention of severe acute respiratory syndrome (SARS), comprising an ~~inactivated SARS virus, a killed SARS virus, an attenuated~~

~~SARS virus, a split SARS virus preparation, or at least one isolated or purified polypeptide comprising the SARS virus antigens Spike protein or a fragment thereof.~~

23. (currently amended) The vaccine of claim 22, comprising an isolated ~~purified~~ polypeptide according to any one of claims ~~1~~ 2 to 8 ~~and 121 to 126~~.

24. (canceled)

25. (currently amended) The vaccine of ~~any one of claims~~ claim 22 ~~to 24~~, further comprising an adjuvant.

26. (original) The vaccine of claim 25, wherein the adjuvant is an aluminium salt or is MF59.

27. (currently amended) The vaccine of ~~any one of claims~~ claim 22 ~~to 26~~, comprising more than one SARS virus antigen.

28. (original) The vaccine of claim 27, wherein the antigens are selected from S, E, N and M.

29 to 93. (canceled)

94. (original) A polypeptide comprising an immunogenic, surface exposed fragment of the amino acid sequence SEQ ID NO: 6042.

95. (original) The polypeptide of claim 94, wherein said fragment does not include the last 50 amino acids of the C-terminus of SEQ ID NO: 6042.

96. (original) The polypeptide of claim 94, wherein said fragment does not include a transdomain region of SEQ ID NO: 6042.

97. (original) The polypeptide of claim 94, wherein said fragment does not include a C-terminus cytoplasmic domain of SEQ ID NO: 6042.

98. (original) The polypeptide of claim 94, wherein said fragment does not include a N-terminus signal sequence.

99 to 113. (canceled)

114. (currently amended) A vaccine of ~~one of claims~~ claim 22 ~~to 37, and 90 to 93~~ further comprising an adjuvant.

115. (currently amended) The vaccine of claim 114 wherein the adjuvant is a detoxified bacterial ADP-ribosylating toxin, a non-toxic double mutant form of *Bordella pertussis* toxoids, chitosan, MF59, aluminium, and aluminium salt or a SMIP.

116. (canceled)

117. (currently amended) A method of vaccinating a subject comprising administering to the subject a vaccine of ~~one of claims~~ claim 22 to 37, and 90 to 93.

118 to 120. (canceled)

121. (new) The polypeptide of claim 8, wherein the second SARS virus protein comprises ORF1a (SEQ ID NO: 6039), ORF1b (SEQ ID NOs: 7188 and 7189), ORF1ab polyprotein (SEQ ID NO: 6041), Matrix protein (SEQ ID NO: 6046), Nucleocapsid protein (SEQ ID NOs: 6051 and 6052), 3CLp protease (SEQ ID NOs: 6569 and 9769), small membrane protein (SEQ ID NO: 6045), any of the hypothetical proteins given in SEQ ID NOs: 6050, 6049, 6048, 6047, 6044, 6043 and 6040, or a fragment thereof.

122. (new) The polypeptide of claim 121, wherein the fragment of the second SARS virus protein comprises any of the polypeptides given in SEQ ID NOs: 2206-2224, 3020-3042, 7180-7817, 7257-7264, 9764-9765, or any of the T-cell epitopes given in SEQ ID NOs: 7400-8040, 8281-9752.

123. (new) The polypeptide of claim 8, wherein the non-SARS virus protein is derived from a coronavirus, influenza virus, rhinovirus, parainfluenza virus, respiratory syncytial virus, adenovirus and/or metapneumovirus.

124. (new) The polypeptide of claim 8, wherein the bacterial protein is a bacterial adhesion protein or fragment thereof.

125. (new) The polypeptide of claim 124, wherein the bacterial adhesion protein is NadA, YadA, UspA2 or a NadA-like protein.

126. (new) The polypeptide of claim 124, wherein the fusion protein comprises an amino acid sequence given in any of SEQ ID NOs: 7197-7206 or SEQ ID NOs: 7302-7306.